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AFRL contributes to communications network

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ROME, N.Y. — Air Force engineers have participated in a study that has mapped plans for a Statewide Wireless Network (SWN) to greatly improve internal and cross-agency communications throughout the Empire State.

Engineers from the Air Force Research Laboratory (AFRL) Information Directorate and the New York State Technology Enterprise Corporation (NYSTEC) defined the wireless communications requirements of various state and local agencies across the state.

The study focused on state and local agencies that communicate using land-mobile radio systems. It included a thorough review of upcoming radio technologies, existing radio systems, communications processes and agency operations, as well as technical evaluations of transmission properties in various regions throughout the state.

The study will aid in the construction of a new statewide radio communications network serving multiple agencies. When built, the network will allow for more secure communications, improve voice clarity, and enable workers to access databases and images in the field.

Most state agencies now use conventional stand-alone radio systems in the field. Many of these analog systems are incompatible, making it impossible for state workers and public safety officers to communicate with one another. In addition, most of these systems can only transmit voice conversations — not data or images — and they provide incomplete coverage in many locales due to hills, mountains, foliage and large buildings causing “dead spots.”

The SWN will be based on the latest digital trunked land-mobile radio systems technology that will allow agencies to share infrastructure while retaining independent operations. It is expected to enhance public safety and bring greater efficiency to state and local agencies.

The network began with a NYSTEC study of New York State Police land-mobile radio communications processes, technology and requirements. That effort was extended to conduct a similar detailed review across a broad spectrum of state agencies. Under a Cooperative Research and Development Agreement, Information Directorate engineers supplied technological support to NYSTEC throughout the process.

NYSTEC is a not-for-profit company founded by New York State in 1995, in the wake of the closing of Griffiss Air Force Base. Collocated with AFRL at the Griffiss Business and Technology Park, the organization’s goal is to leverage military technology to benefit New York businesses and government entities. @